Amendments to the Claims

1. (Currently Amended) A method for combining a data packet in a communication system, the method comprising the steps of:

receiving a transmission of said data packet to obtain a received packet;

demodulating said received packet to be stored in a first storage medium;

determining whether said received packet is a retransmitted packet ~~according to predetermined criteria~~ by examining a medium access control (MAC) frame in said received packet and said stored packet; and,

if so, combining said received packet with a previous packet stored in a second storage medium using a maximum ratio combining method.

2. (Currently Amended) The method of claim 1, wherein the step of determining whether said received packet is a retransmitted packet further comprises the steps of:

determining whether ~~the~~ a length field of said received packet and said stored packet are the same;

determining whether ~~the~~ a retry bit field of said received packet is activated when the length field of said received packet and said stored packet are the same; and,

determining whether ~~the~~ a sequence control field of said received packet and said stored packet are the same when the retry bit field of said received packet is activated.

10/023,094   3

PAGE 4/15 * RCVD AT 12/6/2005 1:04:43 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/24 * DNIS:2738300 * CSID:518 449 0047 * DURATION (mm-ss):03-36

3. (Currently Amended) The method of claim 1, wherein the step of determining whether said received packet is a retransmitted packet further comprises the step of determining whether ~~the~~ an address field of said received packet and said stored packet are the same.

4. (Currently Amended) The method of claim 1, wherein the step of combining the received packet with said previous packet is performed according to ~~the~~ a signal-to-noise ratio (SNR) symbol of said received packet and said stored packet.

5. (Canceled)

6. (Original) The method of claim 1, wherein the step of combining said received packet with said stored packet is performed in an access point (AP).

7. (Original) The method of claim 6, wherein the step of combining said received packet with said stored packet is performed in a mobile station in communication with said AP.

8. (Currently Amended) The method of claim 1, wherein the step of determining whether said received packet is a retransmitted packet further comprises the steps of:

determining whether ~~the~~ a length field of said received packet and said previous packet are the same;

determining whether ~~the~~ a retry bit field of said received packet is activated when the length field of said received packet and said previous packet are the same;

10/023,094   4

determining whether ~~the~~ an address field of said received packet and said previous

packet are the same when the retry bit field of said received packet is activated; and,

determining whether ~~the~~ a sequence control field of said received packet and said

previous packet are the same when the address field of said received packet and said

previous packet are the same.

9. (Currently Amended) A method for combining a data packet in a communication

system, the method comprising the steps of:

receiving and storing a transmission of said data packet in a first storage medium

to obtain a received packet;

extracting a physical layer convergence protocol (PLCP) and MAC header from

said received packet stored in said first storage medium;

comparing the PLCP and MAC header of said data packet stored in said first

storage medium and a previously received packet with error stored in a second storage

medium to determine whether said received packet is ~~said~~ a retransmitted packet; and,

if so, combining said received packet with said previous packet stored in a second

storage medium using a maximum ratio combining method.

10. (Currently Amended) The method of claim 9, wherein the step of combining the

received packet with said previous packet is performed according to ~~the~~ a signal-to-noise

ratio (SNR) symbol of said received packet and said previous packet.

11. (Currently Amended) The method of claim 9, wherein the step of determining

10/023,094   5

whether said received packet is said retransmitted packet further comprises the step of

determining whether ~~the~~ an address field of said received packet and said previous packet

are the same.

12. (Currently Amended) The method of claim 9, wherein the step of determining

whether said received packet is said retransmitted packet further comprises the steps of:

determining whether ~~the~~ a length field of said received packet and said previous

packet are the same;

determining whether ~~the~~ a retry bit field of said received packet is activated when

the length field of said received packet and said previous packet are the same; and,

determining whether ~~the~~ a sequence control field of said received packet and said

previous packet are the same when the retry bit field of said received packet is activated.

13. (Original) The method of claim 9, wherein the step of combining said received packet

with said previous packet is performed in an access point (AP).

14. (Original) The method of claim 13, wherein the step of combining said received

packet with said previous packet is performed in a mobile station in communication with

said AP.

15. (Currently Amended) The method of claim 9, wherein the step of determining

whether said received packet is said retransmitted packet further comprises the steps of:

10/023,094   6

determining whether ~~the~~ a length field of said received packet and said previous packet are the same;

determining whether ~~the~~ a retry bit field of said received packet is activated when the length field of said received packet and said previous packet are the same;

determining whether ~~the~~ an address field of said received packet and said previous packet are the same when the retry bit field of said received packet is activated; and,

determining whether ~~the~~ a sequence control field of said received packet and said previous packet are the same when the address field of said received packet and said previous packet are the same.

16. (Currently Amended) An apparatus for combining a data packet in a communication system, comprising:

a demodulation means for demodulating a transmission of said data to obtain a received packet;

a first storage means for storing said received packet;

a second storage means for storing a previous packet with error; and,

a processor for determining whether said received packet is a retransmitted packet in response to said previous packet ~~according to predetermined criteria~~ by comparing a medium access control (MAC) frame of said received packet and said previous packet; and,

a combining means for combining said received packet with said previous packet when said predetermined criteria is satisfied.

17. (Original) The apparatus of claim 16, further comprising at least one antenna for receiving the transmission of said data and said previous packet.

18. (Original) The apparatus of claim 16, wherein said combining means uses a maximum ratio combining method.

19. (Currently Amended) The apparatus of claim 16, wherein said maximum combining method is performed according to the a signal-to-noise ratio (SNR) symbol of said received packet and said previous packet.

20. (Canceled)

21. (Original) The apparatus of claim 20, wherein said processor further operates to determine that said received packet is a retransmitted packet when the length field of said MAC frame for said received packet and said previous packet are the same.

22. (Currently Amended) The apparatus of claim 16, wherein said processor further operates to determine that said received packet is said retransmitted packet when the a retry bit field of said MAC frame for said received packet is activated.

23. (Currently Amended) The apparatus of claim 16, wherein said processor further operates to determine that said received packet is said retransmitted packet when the an

address field of said MAC frame for said received packet and said previous packet are the same.

24. (Currently Amended) The apparatus of claim 16, wherein said processor further operates to determine that said received packet is said retransmitted packet when ~~the~~ a sequence control field of said MAC frame for said received packet and said previous packet are the same.